LIQUIMIX

Elaston®- W80

Spray Polyurea Elastomer - Waterproofing grade

PRODUCT DESCRIPTION

Elaston - W80 is a two-component, spray-applied, pure-polyurea, designed for use through portable spray equipment such as a Reactor E10hp. Within seconds it forms a tough, elastomeric, protective coating that offers much faster development of strength and lower shrinkage than other polyurea products, making it ideal for use with geofabric or where movement in the substrate is expected soon after application such as when night-time temperatures drop rapidly

INTENDED USES

- Planter boxes
- Wet areas
- Water reservoir rooftops
- For use over geofabric
- Joints on concrete roofs
- Podiums

FEATURES

- Cures in seconds
- Exceptional toughness and flexibility
- Contains no VOC and no catalyst
- Cures to full performance 3-4 times quicker than standard polyurea
- Remains permanently elastomeric
- Will not crack or flake
- perfect for high movement expansion joints or over geofabric

PRODUCT DATA

Volume Solids	100%
Theoretical Coverage	1.5 L / sqm @ 1500 microns (1.5 mm) DFT
Finish	Pigmented
Colour	Green, Mid Grey, White
Gloss	Semi-Gloss
Mixing Ratio	1:1 by volume
Gel Time	6 Seconds
Typical Thickness	1,500 microns standard waterproofing
Cleaner	Reactor Flush or Swell
Flash Point	>149 °C
VOC	0 Grams/Litre
Specific Gravity	1.06

CURE & RECOAT

Substrate Temp	Tacked	Hard Dry	Full Cure	Walk on Time Note 1	Water Immersion Time
25°C	45 sec	5 min	7 Days	5 Min	5 Hrs

Note 1: Once Elaston W80 gels and becomes tack free, it will remain “cheesy” for up to 15 minutes or longer in colder weather. Care should be taken not to damage the coating during this time

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ENGINEERING DATA

Property	Method	Results
Hardness	ASTM D 2240-91 Shore A	80
Elongation at 24°C	ASTM D412-92	400%
Water Absorption	AS 3558.1	<1%
Water Vapour Transmission	E96-05 (B)	0.18g/(h.m^2) 4.30g/(24h.m^2)
Abrasion Resistance	ASTM C501-84, H18 wheel 1000 rev, with 1000g weight	95mg
Tensile Strength	ASTM D412-92	14.8 MPA
Tear Strength	ASTM D 624-86	60-65 N/mm
Cathodic Disbondment with 3mm thick coating	ASTM G8-90 Method B using an impressed current	Rating D

LIMITATIONS

- Standard Aromatic based Polyurea products such as Elaston – W80 will change colour over time, with lighter colours changing more than darker colours. This does not affect the long-term physical performance of the lining. If for aesthetic reasons the colour change is not acceptable, a colour-fast topcoat such as Opalon polyaspartic should be applied or the use of Colourtuff aliphatic polyurea can be considered
- Elaston W80 can only be applied using properly functioning, plural, airless spray equipment by an experienced operator
- Product requires up to 14 days to develop full physical properties and adhesion. Pull-off or other adhesion testing might not produce accurate results during this period

SURFACE PREP

Concrete

The concrete should be at least 28 days old. Ensure that the moisture content of the concrete is less than 7% before applying any coatings. A moisture test as outlined in ASTM D4263 “Standard Test Method for Indicating Moisture in Concrete by the Plastic Sheet Method” can be used to confirm the moisture content

1. Prepare the concrete surface to a clean, dry finish
2. Ensure that any laitance or other invisible contaminants have been removed. Be especially careful with concrete surfaces that have been in contact with form ply or moulds that may contain release agents. These release agents commonly contain heavy hydrocarbon waxes or silicones that can adversely affect the adhesion of the coating system
3. Fill bug holes with PU sealant or Civilox – LV100 primer mixed with Renderfill
4. Render exposed aggregate back to the original profile with a mixture of Civilox - LV100 and Renderfill
5. Remove high spots and protrusions, radius sharp edges and corners. Cove internal 90-degree angles with 45 degree, 20mm flat chamfer
6. Prepare the concrete surface in accordance with SSPC-SP13/NACE 6
7. Smooth, shiny concrete must be roughened to a profile similar to 80 grit sandpaper or to CSP 2 - 5 as documented in the coating system specification
8. Surface preparation methods can include vapour abrasive blasting, dry abrasive blasting, hydro blasting, mechanical scabbling or diamond grinding. Acid etching is not an acceptable surface preparation method

Steel

1. Remove all rust, mill scale, oil and any previously applied coatings back to bare clean steel using abrasive blast. Welds should have slag and spatter fully removed
2. Blast clean to SA 2.5 - AS 1627.9 and a blast profile of 50 to 100 microns
3. For permanent immersion remove any soluble salts on the steel surfaces to a concentration less than 5 micrograms/cm^2

APPLICATION

Equipment

Proportioning pump:	Graco Reactor E10hp or E-XP2 or similar heated, high-pressure, plural component
Gun:	Graco Fusion-AP or similar, impingement mix, airless
Pressure of material at gun:	>2,000 psi minimum while spraying
Temperature of material at gun:	65°C

Environment

Relative humidity:	The relative humidity must be less than 85%
Dew point:	The substrate temperature must be at least 3 °C higher than the dew point temperature
Substrate Temperature:	The substrate temperature must be a minimum of 5°C

Mixing

Stir Part B at high speed, without entrapping air, using a Graco Twistork drum stirrer for about 10 minutes then reduce speed to slow during the spraying. For smaller containers use a mechanically powered, flat paddle stirrer

Thinning

Elaston - W80 should never be thinned. Viscosity is controlled using heat

Cleanup

Reactor Flush may be used for general clean-up of equipment and to flush the plural pumps and hoses. To remove cured polyurea and overspray from metal parts soak in SWELL. Use separate soak containers for part A and part B components. The use of plastic soak containers with removable baskets and clip-on lids makes the job easier. Replace the SWELL regularly as soon as it starts turning cloudy and dirty.
NOTE: NEVER USE SWELL TO CLEAN PAINTED SURFACES AS IT WILL STRIP THE PAINT. NEVER USE SWELL TO FLUSH PUMPS AND HOSES. DO NOT ALLOW SWELL TO COME INTO CONTACT WITH THE OUTSIDE PROTECTIVE POLYURETHANE COVER OF HOSES

COMPATIBILITY

Primers

Civilox - LV100
Civilox - LV110
Aralox - FL150
Civilox - HB200

Topcoats

Elaston - W80

Elaston®- W80

Typical Systems

Substrate	Environment	Substrate Prep	Coat	System	DFT
Concrete	Rooftop		1st Coat 2nd Coat	Aralox – FL150 Elaston - W80	(200µ) 3000µ
Concrete	Planter Box		1st Coat 2nd Coat 3rd Coat	Civilox - LV110 Civilox - HB200 Elaston - W80	(200µ) 125µ 3000µ
Steel	General protection	Blast SA 2.5	1st Coat 2nd coat	Civilox - HB200 Elaston - W80	125µ 3000µ

STORAGE & HANDLING

Store in dry, shaded conditions away from sources of heat and in the original properly sealed containers. Protect from heat and frost. Protect contents from moisture. Do not allow water to pond on top of drums.
A shelf life of 24 months minimum is typical with unopened containers if stored at ambient conditions at 25°C. If either component is opened and partially used, it should be purged with nitrogen or desiccated air and resealed

PACK SIZE

400L Kits
225Kg of Elaston - W80 Part A in a 200L Container
200Kg of Elaston - W80 Part B in a 200L Container

40L Kits
22.5Kg of Elaston - W80 Part A in a 20L Container
20.0Kg of Elaston - W80 Part B in a 20L Container

HEALTH & SAFETY

Elaston - W80 is for professional use only.
This product contains isocyanates and may require the use of air feed hoods.
This product should not be used without consulting the Safety Data Sheets first.
Observe all health and safety as well as environmental legislation that applies in your state

DISCLAIMER

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